Growing Leaders: The Practice of Learning from Practice

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How Would You Create a Star on Earth?



(photo credit: Lawrence Livermore National Laboratory)

National Ignition Facility

The Way We Work...



"It takes exactly the same skill set people will need more of in the future to collaborate on work projects."

Rob Carter, CIO of Fed Ex, on learning from "World of Warcraft"

(Time, May 25, 2009)

...is Changing



Defining the Universe of Complex Projects

	Complex Project-Based Organization	Functional Organization
Problems	Novel	Routine
Technology	New/invented	Improved/more efficient
Team	Global, multidisciplinary	Local, homogeneous
Cost	Life cycle	Unit
Schedule	Project completion	Productivity rate
Customer	Involved at inception	Involved at point of sale
Survival skill	Adaptation	Control/stability

Project-Based Environment

Strengths

- Adaptable to changing circumstances
- Customer orientation
- Focus on product, not organization
- Multidisciplinary teams

<u>Weaknesses</u>

- Diffuse authority / lack of direct control
- Tunnel vision
- Organizational cohesion
 - Decentralized learning
 - Knowledge sharing across community

Increasing Project Complexity

PROGRAMMATIC_

TECHNICAL

Budget

Interfaces/systems engineering

Technological readiness

One-of-a-kind systems

Harsh environment

Software

Long operational lifetimes

Unique test facilities & eqpt.

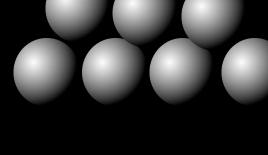
High performance requirements

It has to work the first time

Contractual

Schedule

Sustained commitment



PEOPLE

(adapted from Vern Weyers, 2006)

Dynamic Context

Context

Complexity

Uncertainty

Risk

Required capabilities

Mitigation when possible

Resilience when necessary

A New Way of Thinking and Learning

To cope with a challenging world, any entity must develop the capacity of shifting and changing— of developing new skills and attitudes; in short the capacity of learning.

Arie De Gues, The Living Company

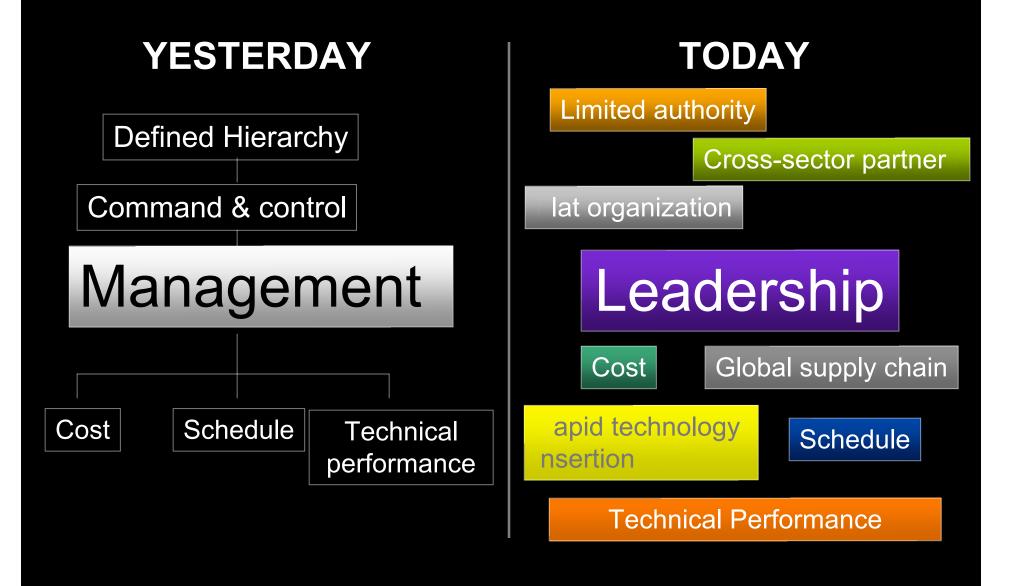
Managers and Leaders: Are They Different?

For those who become managers, a survival instinct dominates the need for risk, and with that instinct comes an ability to tolerate mundane, practical work. Leaders sometimes react to mundane work as an affliction.

Leaders work from high-risk positions; indeed, they are often temperamentally disposed to seek out risk and danger, especially where the chance of opportunity and reward appears promising.

Source: Abraham Zaleznik, "Managers and Leaders: Are They Different?" *Harvard Business Review*, 1977.

Project Management & Project Leadership



Qualities of an Adaptive Organization

- 1. Elephants in the room are named.
- 2. Responsibility for the future is shared.
- 3. Independent judgment is expected.
- 4. Leadership capacity is developed.
- 5. Reflection and continuous learning are institutionalized.

Source: Grashow, Heifetz, & Linsky, The Practice of Adaptive Leadership

Project Academies Gaining Popularity

A world shortage of top class managers to run increasingly complex projects and programmes, and the requirement by project-led companies for consistent standards across worldwide activities, is fuelling a global trend for organisations to develop talent through their own internal academies. **Rick Waghorn** reports.

Source: Project (Association for Project Management, UK)

Dimensions of Effectiveness



Levels and Objectives for Learning

INDIVIDUAL

----- COMPETENCIES

TEAM

→ PROJECT SUCCESS

ORGANIZATION

→ SUSTAINABILITY

Align and Focus

Align with organizational strategy, focus on practitioners.

Mission requirements

Internal External

Competency models

Project management Systems engineering Career development framework

individual, team, and organizational learning

Training curriculum for all career levels

Hands-on assignments

Coaching and mentoring

Expert practitioner support to teams

Knowledge sharing forums & publications

Individual, Team, Organization

INDIVIDUAL

- Training curriculum
- Hands-on opps.
- core curriculum for 4 career levels
- in-depth offerings in subject areas
- competitive selection for hands-on opportunities

TEAM

Direct support to project teams

- online assessments
- workshops
- mentoring and coaching
- expert practitioners
- team building and process support

ORGANIZATION

Knowledge sharing

- forums for project managers, systems engineers, and principal investigators
- publications
- case studies
- communities of practice

http://appel.nasa.gov

APPROACH

ACTIVITIES

Cultivating Reflective Practitioners

Stories help create a community of practitioners who are reflective and geared toward sharing.

People who share their stories get a feeling of belonging to a larger community as well as a sense of dignity.

Closing Thought

Growing project leaders is not enough ——

Cultivating the exercise of project leadership is the goal.